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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/995,031	11/29/2001	Ricky Amos	YOR920010633US1	9669
23389 75	90 08/18/2005		EXAMINER	
SCULLY SCOTT MURPHY & PRESSER, PC			LANDAU, MATTHEW C	
400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530			ART UNIT	PAPER NUMBER
			2815	

DATE MAILED: 08/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<u> </u>				——————————————————————————————————————
		Application No.	Applicant(s)	
		09/995,031	AMOS ET AL.	
Office Action Sumi	nary	Examiner	Art Unit	
	:	Matthew Landau	2815	
The MAILING DATE of this Period for Reply	communication app	ears on the cover shee	et with the correspondence a	ddress
A SHORTENED STATUTORY PI THE MAILING DATE OF THIS CO  Extensions of time may be available under the after SIX (6) MONTHS from the mailing date  If the period for reply specified above, the  Failure to reply within the set or extended pe Any reply received by the Office later than the earned patent term adjustment. See 37 CFR	OMMUNICATION. e provisions of 37 CFR 1.13 of this communication. than thirty (30) days, a reply maximum statutory period w riod for reply will, by statute, tee months after the mailing	6(a). In no event, however, ma within the statutory minimum o ill apply and will expire SIX (6) cause the application to becon	ay a reply be timely filed  of thirty (30) days will be considered time  MONTHS from the mailing date of this ne ABANDONED (35 U.S.C. § 133).	
Status				
Responsive to communicat     This action is FINAL.      Since this application is in a closed in accordance with terms.	2b)☐ This condition for allowan	action is non-final. ce except for formal r	• •	ie merits is
Disposition of Claims				-
4) ☐ Claim(s) 1-5 and 7-16 is/are 4a) Of the above claim(s) 5) ☐ Claim(s) is/are allow 6) ☐ Claim(s) 1-5 and 7-16 is/are 7) ☐ Claim(s) is/are object 8) ☐ Claim(s) are subject	is/are withdrawed. e rejected. ted to.	n from consideration.		
Application Papers				
9) The specification is objected 10) The drawing(s) filed on Applicant may not request that Replacement drawing sheet(s) 11) The oath or declaration is of	is/are: a) acce any objection to the d including the correction	epted or b) objected Irawing(s) be held in abo on is required if the drav	eyance. See 37 CFR 1.85(a). ving(s) is objected to. See 37 C	• ,
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a) All b) Some * c) No No Certified copies of the 2. Certified copies of the	one of: e priority documents e priority documents d copies of the priori nternational Bureau	have been received. have been received ity documents have be (PCT Rule 17.2(a)).	in Application No een received in this Nationa	I Stage
Attachment(s)		_		
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing</li> </ol>	Review (PTO-948)		ew Summary (PTO-413) No(s)/Mail Date	
3) Information Disclosure Statement(s) (PT Paper No(s)/Mail Date		5) 🔲 Notice	of Informal Patent Application (PT	O-152)

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#### **DETAILED ACTION**

## Response to Amendment

The declaration filed on August 1, 2005 under 37 CFR 1.131 is sufficient to overcome the Lin et al. reference (US Pat. 6,458,695).

In light of the above noted declaration, Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5, 7-12, and 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Brown et al. (US Pat. 6,541,320, hereinafter Brown)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

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Regarding claims 1-3, 5, 7-12, and 14-16, Figure 2E of Brown discloses a metal oxide semiconductor field effect transistor (MOSFET) device comprising: a semi-conducting substrate 50 (n-type silicon) (col. 3, lines 24-34) having a source and drain region (inherent); a gate dielectric layer 52 (SiO<sub>2</sub>) (col. 3, lines 53-55) having a thickness less than 50 angstroms (1 nm) (col. 3, lines 61-64) on said semi-conducting substrate; and a gate 54 formed of a metal comprising Re (col. 3, line 67 – col.4, line 3) on top of said gate dielectric layer.

Claims 1-4, and 7-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Callegari et al. (US Pat. 6,664,186, hereinafter Callegari).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claims 1-4 and 7-15, Figure 1 of Callegari discloses a MOSFET device comprising: a semi-conducting substrate 18 (n-type silicon) (col. 10, line 60 and col. 12, lines 37-39) having source/drain regions 20; a gate dielectric layer 15 (aluminum oxide) (col. 10, lines 58-60) having a thickness less than 50 angstroms (1 nm) (col. 11, lines 1-4) on said semi-conducting substrate; and a gate 19 formed of a metal comprising Re (col. 12, lines 45-47) on top of said gate dielectric layer.

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## Response to Arguments

Applicant's arguments with respect to claims 1-5 and 7-16 have been considered but are most in view of the new ground(s) of rejection.

### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Landau whose telephone number is (571) 272-1731.

The examiner can normally be reached from 8:30 AM - 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (571) 272-1664. The fax phone numbers for the organization where this application or

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proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should any questions arise regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew C. Landau

August 16, 2005

TOM THOMAS
SUPERVISORY PATENT EXAMINER